DOCUMENT RESUME

ED 142 975 CS 003 613

AUTHOR McClure, Erica F.
TITLE Aspects of Code-Switching in the Discourse of Bilingual Mexican-American Children. Technical Report No. 44.
INSTITUTION Bolt, Beranek and Newman, Inc., Cambridge, Mass.; Illinois Univ., Urbana. Center for the Study of Reading.
SPONS AGENCY National Inst. of Education (DHEW), Washington, D.C.
PUB DATE Apr 77
CONTRACT 400-76-0116
GRANT NE-G-00-3-0147
NOTE 38p.

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Bilingualism; Child Language; Children; Elementary Education; Language Development; *Language Research; *Language Usage; *Language Variation; *Mexican Americans; *Sociolinguistics; Spanish Speaking
IDENTIFIERS *Center for the Study of Reading (Illinois)

ABSTRACT

This paper examines the formal and functional properties of code-switching among Mexican-American children. Two formal types of code-switching, code-mixing and code-changing, are identified, and developmental patterns in their use are discussed. Two major functional types of code-switching are also differentiated. The first, situational code-switching, is discussed in terms of four parameters: participants, topic, discourse type, and setting. The second, stylistic code-switching, is subdivided for discussion into code-switching which takes place to mark: (1) emphasis, (2) focus, (3) elaboration, (4) clarification, (5) attention attraction or retention, (6) mode shift, (7) topic shift, and (8) addressee shift. The discussion of functional types of code-switching includes the presentation of a few broad developmental trends. (Author)

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Technical Report No. 44

ASPECTS OF CODE-SWITCHING IN THE DISCOURSE OF BILINGUAL MEXICAN-AMERICAN CHILDREN

Erica F. McClure

University of Illinois at Urbana-Champaign

April 1977

University of Illinois
at Urbana-Champaign
1005 West Nevada
Urbana, Illinois 61801

Bolt Beranek and Newman Inc.
50 Moulton Street
Cambridge, Massachusetts 02138

The research reported herein was supported in part by the National Institute of Education under Grant No. HEW-NIE-NE-G-00-3-0147 and Contract No. MS-NIE-C-400-76-0116.

CS003 613

Abstract

In this paper we examine the formal and functional properties of code-switching among Mexican-American children. Two formal types of code-switching, code-mixing and code-changing, are identified and developmental patterns in their use are discussed. Two major functional types of code-switching are also differentiated. The first, situational code-switching, is discussed in terms of four parameters: participants, topic, discourse type, and setting. The second, stylistic code-switching is subdivided for discussion into code-switching which takes place to mark: (1) emphasis, (2) focus, (3) elaboration, (4) clarification, (5) attention attraction or retention, (6) mode shift, (7) topic shift, and (8) addressee shift. The discussion of functional types of code-switching includes the presentation of a few broad developmental trends.

0. Introduction. Although multilingualism has existed since antiquity, it is only in the past two decades that scholars have paid more than cursory attention to the significance of the multilingual's alternation among languages. Most research has been concerned with the sociolinguistic parameters of code-switching, with specifying the conditions under which each language is selected (vide e.g. Rubin, 1962; Ervin-Tripp, 1964; Gumperez, 1964; 1970; Blom & Gumperz, 1972; Gumperz & Hernández-Chavez, 1972; Hymes, 1972). As the early studies tended to consider factors such as setting, topic, and participants which were unlikely to change within a turn of speech, much less a sentence, the grammatical parameters of code-switching were largely ignored. Consequently as late as 1975 we find in the literature such a statement as:

> The variety found in these sixteen citations suggests that there are perhaps no syntactic restrictions on where switching can occur ...
>
> (Lance, 1975: 143).

Today, concommitant with the interest in stylistic functions of code-switching (vide e.g. Gumperz, 1970; Blom & Gumperz, 1972; Gumperz & Hernández-Chavez, 1972; McClure & Wentz, 1975; Wentz, 1976) which may occasion intrasentential code-switching (vide e.g. Annamalai, 1971; Gumperz & Hernández-Chavez, 1972; Gingrás, 1974; Kachru, 1975; Wentz & McClure, 1976a; Wentz, 1976; Pfaff, 1976; Sridhar, 1978). Thus a substantial data base is now being developed on both the formal and functional aspects of code-switching. Yet a gap remains.

Little has been written about code-switching among children.[1] This paper addresses that topic. Both linguistic and sociolinguistic parameters of code-switching will be considered. The analysis is based on tape recordings of children ranging in age from three to fifteen. Complete verbal transcripts of ninety hours of tape were situationally annotated and divided into conversations and turns of speaking. Those containing code switches were examined for communicative intent and grammatical structure.

Tape recordings were made in two communities. In the first community, a small city of about 45,000 inhabitants, eight, three and four year old Mexican-American children enrolled in a Headstart program were observed in school for six months. In the second community, a small town of about 1,400 inhabitants, the thirty-nine Mexican-American children enrolled in Kindergarten through fourth grade during the two year period of research plus three pre-school children who were in the care of older children in the sample, were observed at school, at home, in the local park and in the project mobile home.

1. The communities. Since social structural variables affect language selection patterns as Barker (1972) and Blom and Gumperz (1972) among others note, we include here a very brief description of our research sites. The Mexican-American community in the small city numbers approximately 2,200. This population is settled out, employment being largely in the local canneries. Most families are concentrated in the eastern section of town, almost all in public housing. The children are concentrated in the neighborhood elementary school where they constitute a large portion of the enrollment. There is little interaction between the Mexican-American community and the Anglo community and not much more between the Mexican-American community and the Black community, although the two communities are geographically intermingled. The Mexican-American community is itself relatively cohesive despite the diverse origins and varying educational and residential histories of its members.[2]

Mexican-Americans constitute about ten percent of the population of the small town and Anglos, the remaining ninety percent. The former are divided into two groups--settled out families who are more or less permanently resident and migrant men. There is no barrio nor are there residential clusters. Instead the Mexican-Americans are dispersed throughout the entire community with the exception of one newer section with only high cost housing. Two local nurseries are the main source of employment for the Mexican-Americans.

Social activity in the community focuses around the churches and schools. There are several churches in town but no Catholic church. The minister of one congregation wished to allow the Catholic priest from the neighboring town to conduct services in his building, but his congregation opposed the arrangement. Consequently since most of the Mexican-Americans are Catholic, they must travel four miles to the next town for services. Most attend irregularly.

Athletic activities at the high school (grades five through twelve) and student performances at both the high school and the elementary school (Kindergarten through fourth grade) are major social events for the community. However in general the Mexican-American community is only peripherally involved in these activities. Only one Mexican-American boy[3] was a member of a varsity sports team. He and his family participated fully in the round of activities surrounding the football season; but the other Mexican-American families generally do not. Indeed most have very negative feelings toward the high school. The high school drop out rate stood at 100% at the time of our research, no Mexican-American having graduated.

In 1972 a bilingual pull out program was begun in the elementary school.[4] The children of all but two of the Mexican-American families were enrolled in it.[5] During the course of our research, the program sponsored a yearly Mexican-American culture day featuring music, dance, and food. It was the only event we witnessed in which large numbers of Anglo and Mexican-American adults participated jointly.[6] Even on this occasion there was little interaction between the two groups.

While Mexican-American and Anglo children in grades K through four play together at recess and interact in class, there is a tendency for same ethnicity play groups to form frequently, especially in the case of those children whose English is limited. Interaction between Anglos and Mexican-Americans is much more restricted at the high school.

Outside school few of the Mexican-American children interact often with Anglos even though residential patterns are such that they have Anglo neighbors. There is little interaction with other Mexican-American children either. Indeed elementary school children play primarily with siblings after school. This fact is partially explained by the dispersal of the Mexican-American families throughout the community but also relates to the lack of social cohesion in the Mexican-American community. This Mexican-American community, unlike that of the city has neither well-established leadership nor any community-wide social institutions.

2. Syntactic constraints on code-switching. In discussing code-switching, many authors have attempted to differentiate it from other phenomena resulting from language contact. Thus, Haugen differentiates among three degrees of convergence:

> 1. Switching, the alternate use of two languages;
> 2. interference, the overlapping of two languages; and
> 3. integration, the regular use of materials from one language in another, so that there is no longer either switching or overlapping, except in a historical sense (1956: 40)

and Gingrás states:

> It is not always obvious whether we have an instance of code-switching or of some sort of lexicalization (i.e. borrowing)...I reserve the term "substitution" for what an individual does and the term "lexicalization" for what speakers of a dialect may have done... It should also be pointed out that in dealing with observational data, it is difficult to sort out problems of various kinds due to inference between the two codes. Since interference appears to be a result of performance factors (assuming we have the case of a coordinate bilingual who can keep his two codes fairly separate), I will also try to ignore cases of bilingual

> interference, since I have no interest in performance factors at this time.
>
> Consequently, in studying code-switching, I have tried to concentrate only on those cases where it is obvious (at least to me) that we have an instance of code-switching (1974: 169-170).

On the other hand, Pfaff concludes that rather than segregating language contact phenomena it may be advantageous to study their inter-play:

> While the distinctions should not be obscured, all these can be considered as alternative realizations of underlying meanings and can be tabulated and quantified as such (1975: 17).

It is this position that we shall adopt here.

Pfaff (1975: 5) suggests a classification of three general types or styles of code-switching defined by form and function. The first type, "typical of casual interaction between peers, close friends, or regular associates when conversation centers around every day topics," is characterized by switches occurring either at surface sentence breaks or at independent or dependent clause breaks. One or two word lexical switches are low in frequency. Type two "is typical of casual or more formal interactions which for one of several reasons, seem to be mainly in Spanish. Whole sentence switches are much more frequent than switches as dependent or independent clauses." The third type is basically Spanish street talk, "the jargon of the 'bato loco.'" Switching to English is mainly for single nouns, verbs, adjectives and set phrases."

Our data support a different classification, bipartite as opposed to tripartite. The children's code-switching appears to reflect the operation of two separate linguistic devices: code-changing and code-mixing.

Code-changing, generally motivated by situational and stylistic factors, is the alternation of languages at the level of the major constituent (e.g. NP, VP, S). The code-change is a complete shift to another language system. All function words, morphology, and syntax are

abruptly changed as in:

1. I put the forks en las mesas.
(on the tables)

2. Let's see qué hay en el dos.
(what there is on two)

The vast majority of spontaneous code-changes in our data are at the surface structure sentence level. Of our corpus of over 500 code-changes, only 30[7] involved smaller constituents than sentences, of which nineteen were noun phrases. A disproportionate number occurred in narratives. Moreover only one occurred in the speech of a child under nine. Given that non-sentence code-changes appear to be much more frequent in the corpora of Lance, Gingrás and Pfaff, and that they can be elicited from all the children in sentence-imitation tasks, while random switches can not[8] it appears likely that the ability to use non-sentence code-changes productively is acquired relatively late by the child in the process of becoming bilingual. Our younger informants code-changed relatively rarely. Another ability which appears to be developed late by these children is that of handling cross-language ellipsis. In the following examples, the first responses (B_1) are characteristic of the younger children, the second (B_2) of the older:

3. Speaker A: ¿Quién tiene hambre?
(lit. Who has hunger?)
B_1: I do.
B_2: I am.

4. Speaker A: ¿Cuántos años tiene?
(lit. How many years has he?)
B_1: He gots eight.
B_2: He's eight.

5. Speaker A: Who are you calling?
B_1: Ei doctor.
(the doctor)

B_2: Al doctor.
(to the doctor)

6. Speaker A: I don't care.
B_1: Yo sí.
(I yes)
B_2: A mí sí.
(to me yes)

The older children answer as if the previous utterance had been in the language of the response. The younger children's responses look as if they are relexicalizations of responses in the original language.[9]

Code-mixing, the other type of code-switching, is the individual's use of opposite language elements which cannot be considered to be borrowed by the community. It occurs when a person is momentarily unable to access a term for a concept in the language which he is using but can access it in another code or when he lacks a term in the code he is using which exactly expresses the concept he wishes to convey. Code-mixing of color terms by the children studied provides a good example of the former since detailed analysis shows that for these children color terms in Spanish and English have identical referential and affective meanings. The sentence:

7. No van a aceptar a una mujer que can't talk business
(They are not going to accept a woman who)

is an example of the latter type of code-mixing. "Can't talk business" is derived from an idiomatic unit in English which has for the speaker no precise, culturally appropriate Spanish equivalent. Sentences containing code-mixes are generally perceived by the children to be sentences of one language containing elements of the other, unlike those containing code-changes which are felt to begin in one language and change to the other.

Code-mixing takes place within constituents, and there is usually at some level an indication that the code-mixed item is marked for use in a sentence of another code. For example, in sentence seven above, the use of que instead of who to introduce the relative clause suggests that the

phrase is a code-mix and not a code-change while in 8, the noun

8. I put the tenedores on the table.
(forks)

phrase "the tenedores" is marked for use in an English sentence by the article "the." The morphology and phonology of "tenedores" (/tenedor + es/) is entirely Spanish nonetheless. Consequently, it is unlikely that, among bilinguals, such an occurrence would represent a lexical borrowing. In the sentence:

9. I want a motorcycle verde. (green)

we can say that the Spanish adjective "verde" is code-mixed into an English sentence. Spanish placement of "verde" indicates that it is not a borrowing. The noun phrase "a motorcycle verde" is marked by "a" as being an English noun phrase. It could not be used in a Spanish sentence, but "un motorcycle verde" could, in which case "motorcycle" might either be a borrowed or code-mixed noun. Its status is ambiguous because there are no clear morpholigical or syntactic indicators. Phonology is only one clue in disambiguating the status of opposite language elements, because they often contain a mixture of Spanish and English sounds.

While a word may caution phonemes of both languages, there are no examples in the children's speech of words containing morphemes of both languages. There are no code-mixes within a word. Derivational or inflectional affixes occur with a root of the other language only if it has been phonologically adapted (in Gingrás' terms, only if it is a substitution or lexicalization).

Code-mixing seems to parallel borrowing in the relative frequency with which different syntactic categories are involved. Ornstein states:

> As has been noted, also among other contact cases, Raramuri, in common with other languages, tends to borrow nouns more readily than any other word class. Beyond this, loans from other categories are rare, although, as noted elsewhere here, closer investigation of existing calques needs to be performed. At any rate

> the literature on borrowing appears to indicate that adjectives tend to follow nouns in frequency, with verbs often next, and other classes less well represented (1976: 84).

Table One summarizes our data. They accord with Ornstein's comments about regularities in borrowing except that there are only five code mixed verbs. They also follow the pattern noted by Bloomfield:

> In all cases...it is the lower language which borrows predominantly from the upper (1933: 464).

Spanish sentences contain code-mixes far more frequently than English sentences, and it is Spanish which is the lower language and English is the upper.

In concluding our discussion of the syntactic parameters of the code-switching of the children studied, we may note a developmental pattern. Children[10] who do not have equal or near equal proficiency in both Spanish and English code-switch predominantly at the word level. Most such switches are of nouns but more than a negligible number of interjections and color adjectives may also be found. Such children do little code-changing and most is at the sentence level. Children who are fluent bilinguals (in general the older children) code-switch predominantly at the constituent level. However, for them also code-changing is mainly of sentential level constituents. We should also note that there are children who are competent bilinguals but who virtually never code-switch, and that one of the younger girls code-switches almost incessantly. Table 2 summarizes our data on code-mixing and code-changing by age.

3. Code selection and situation. In verbal interaction, language selection by adult bilinguals has been shown to be partially determined by participants, setting, and topic. Participants and topic have also been found to be important in the register variation of monolingual Anglophone children (Fischer, 1958; Weeks, 1971). Among the children we studied, it appears that the earliest systematic code-switching is a function of the category "participants." Such switching occurs not only

Table 1

Code Mixing by Matrix Language and by Age

	Informants*				Informants	
in Spanish sentences	jr	sr	total	in English sentences	jr	sr	total
Nouns							
$(\text{Ind Art})_S + (N)_E$	18	10	28	$(\text{Ind Art})_E$** $+ (N)_S$	3	0	3
$(\text{Def Art})_S + (N)_E$	21	12	33	$(\text{Def Art})_E + (N)_S$	3	0	3
$(\text{Poss Adj})_S + (N)_E$	21	8	29	$(\text{Poss Adj})_E + (N)_S$	2	1	3
$(\text{Dem Adj})_S + (N)_E$	3	0	3	$(\text{Dem Adj})_E + (N)_S$	1	1	2
$(\text{Numeral})_S + (N)_E$	0	3	3	$(\text{Numeral})_E + (N)_S$	0	0	0
$(\text{Prep})_S + (N)_E$	6	7	13	$(\text{Prep})_E + (N)_S$	0	0	0
$(\text{Art})_S + (\text{Adj})_E + (N)_E$	3	4	7	$(\text{Art})_E + (\text{Adj})_S + (N)_S$	0	0	0
$(\text{Prep})_S + (\text{Adj})_E + (N)_E$	0	2	2	$(\text{Prep})_E + (\text{Adj})_S + (N)_S$	0	0	0
$(\text{Adj})_S + (N)_E$	7	2	9	$(\text{Adj})_E + (N)_S$	0	0	0
Adjectives							
$(\text{Adj})_E$	9	2	11	$(\text{Adj})_S$	0	1	1
$(\text{Adj-color})_E$	20	8	28	$(\text{Adj-color})_S$	0	0	0
Verbs							
$(\text{Verb})_E$	2	0	2	$(\text{Verb})_S$	1	2	3
Adverbs							
$(\text{Adv-place})_E$	1	3	4	$(\text{Adv-place})_S$	0	1	1
$(\text{Adv-time})_E$	1	2	3	$(\text{Adv-time})_S$	0	2	2
Conjunctions							
$(\text{Conj})_E$	0	0	0	$(\text{Conj})_S$	1	5	6

Table 1 (continued)

Others							
$(\text{interjection})_E$	7	4	11	$(\text{interjection})_S$	5	4	9
$(\text{Epithet})_E$	1	2	3	$(\text{Epithet})_S$	3	0	3
total code mixes	138	75	213		22	22	44

*Informants are ranked as junior or senior on the basis of their linguistic maturity. Junior informants are those born after 12/30/66, while senior informants were born before 12/31/66, except that one informant (born 5/14/68) is classified as a senior despite his age.

**Nouns occurring with a zero article are classified as neither code mixing nor code changing since it cannot be determined which they are.

Table 2

Code-Mixing and Code-Changing by Age and Language

	informants						
	junior			senior			
code-mixing	Sp	Eng	Total	Sp	Eng	Total	Total
sample	138	22	160	75	22	97	257
percent	54%	9%	62%	29%	9%	38%	100%
code-changing							
sample	15	10	25*	59	56	115	140
percent	11%	7%	18%	42%	40%	82%	100%

*One junior informant (born 11/3/67) was omitted as her speech differs markedly from that of the other junior informants as regard code-changing. She produced 52 code-changes in the material sampled, which changes the junior-senior rates to 40% vs. 60% instead of 18% vs. 82%.

at junctures between conversations but also between and within turns of speaking. Examples of the latter two types are:

10. CS (girl, 7) "I want to play checkers."
    E (Anglo researcher) "Ask Roli if you can."
    CS: "Puedo jugar checkers?" (to boy, 4)
    (Can I play checkers?)

11. P (girl, 9): "You have to king me."
    D (girl, 6): "Do what?"
    P: "You gotta put one on top."
    Mira, cómete éste. (to boy, 4)
    (Look, eat this)

Three characteristics of participants are important: language proficiency, language preference, and social identity.

Inappropriate choice of language when addressing a monolingual is rare. For example, although upon first entering school, children with little prior experience with the Anglo community occasionally used Spanish with Anglophone school teachers and pupils, such behavior was no longer observed after their first month of classes. Children lacking even minimal facility in English quickly resorted to one of two strategies: silence and passivity or the use of non-verbal communication devices such as gesture to supplement one or two word telegraphic utterances. In determining whether it is possible to use a particular language with an individual, young children appear to rely on binary judgments of linguistic competence--either a person knows a language or he does not. Assessments of relative ability do not enter into their decision about language choice as they tend to do among adults and older children. Thus, those children five or younger who were Spanish dominant spoke to the author in Spanish, the language in which they were most comfortable despite the fact that in most cases their English was more fluent than her Spanish. Older children make finer discriminations in selecting a code for use with a given individual. They seem to consider both the

absolute degree of the hearer's proficiency in both languages and the relative language proficiencies of speaker and hearer. The older children in the second group studied used English almost exclusively in interacting with the author and Spanish almost exclusively in interacting with the four children of the group whose English was rudimentary.

Assessments of language facility also appear to account at least partially for the fact that with pre-schoolers, older children use Spanish predimonantly. However, as this pattern obtains even in the case of the one pre-schooler in the second group who is equally proficient in Spanish and English, it would appear that the social identity[11] pre-schooler is also a factor. A random selection of fifteen one-hour recordings contained 188 utterances directed to pre-schoolers, 67% of which were in Spanish. The English addressed to pre-schoolers is generally restricted to short, routinized expressions, while Spanish is used for most utterances with high information content. Siblings of pre-schoolers tend to address more English to them than do other children. In our corpus, 43% of the 118 utterances addressed by siblings to pre-schoolers were in English. Only 22% of the 70 utterances addressed by non-siblings to pre-schoolers were in English. Perhaps in interaction among siblings the social identity pre-schooler is not always salient. Other identities such as sibling, may take precedence or identity itself may not be salient and code-selection may be more strongly influenced by other factors.

A good illustration of the fact that language preference and not merely ability is an important consideration of the fact that in the second community one child who is quite fluent in English but prefers Spanish is addressed far more frequently in Spanish than are her peers who prefer to use English. Furthermore, even the very young Spanish dominant children use English in addressing a young girl who, despite the fact that she knows Spanish, refuses to use it with anyone but a monolingual.[12]

Social identity is the third property of participants which influences language choice. There appears to be a characteristic pattern of language use associated with every identity relationship.[13] In most families, child-parent interactions take place in Spanish. Interactions between children and adults from the Mexican-American community also take place in Spanish.

For teacher-pupil interactions, English has been established as the appropriate language. The advent of a bilingual-bicultural program in 1972 complicated the situation. The instructors in this program were a female Anglo teacher and a Mexican-American teacher's aide, both fluent bilinguals. The former has had great difficulty in sustaining conversations in Spanish with children who know English, especially those who began school before the bilingual program started. The latter has not, although children occasionally address her in English (see Table 3). The difference may be that there is an alternate identity relationship, child-Mexican-American adult, associated with the use of Spanish which can obtain between the children and the teacher's aide. The corresponding relationship between the children and the teacher, child-Anglo adult is associated with the use of English.

With the researchers, Anglos and Hispanos alike,[14] who attempted to define for themselves an identity outside the children's previously established categories, the children generally used a mixed register in which discourse alternated between Spanish and English with frequent code-mixing and code-changing. However, when interactions with them were defined in terms of identities such as Mexican-American adult or or Anglo adult, code-switching was minimal.

Identity also affects language choice in interactions among children. Shifting identity relationships among children are often marked by code alternation just as Blom and Gumperz (1972) have demonstrated among adults. Both peer and sibling interactions are carried on in a mixed register. Interactions between children which involve caretaker-child relationships are almost always in Spanish. We observed that if a

younger child were hurt, he was comforted by an older child in Spanish even though an immediately preceding interaction between the children might have taken place in English. The following sequence is typical:

12. P (girl, 9): "Stop it Roli. You're stupid!"
R (brother, 3): "You stupid Pat."
P: "Don't hit me!" (laughing and holding R off)
R: (trips and begins to cry)
P: "Ay, Roli! Mi hijito ¿qué pasó?
(Oh, Roli! Honey what happened?)

Likewise, we found that when children assumed a position of authority they issued commands in Spanish. Thus, when one of our research assistants went by herself to collect data from a group of children in the project mobile home, rather than as usual in the company of several other researchers, one of the older boys spontaneously assumed the role of the one responsible for keeping order among the rest. His orders in this role were issued in Spanish. It would appear that behavior in the caretaker-child relationship is patterned after that between parent and child. Children at play have also been observed to switch from Spanish to English when switching from a peer relationship to a teacher-pupil relationship.

Language alternation to mark a shift in identity relationship is, of course more common among older children than among younger children since the former have access to more identities. We found that as children become older their knowledge of English increases and so does the number of English-associated identity relationships accessible to them. Thus their use of English increases. Since in the children's culture English is less commonly used in those relationships in which females may participate (most being associated with the home) than in which men participate, the sex difference between the amounts of English and Spanish used by the children in free conversation (see Table 3) is not surprising.

Table 3

Percentages of Spanish and English Used in Various Contexts

	English	Spanish	English with Spanish Elements	Spanish with English Elements	Changes at sentence boundary	Changes within sentences
interview-Family A (only the children control any English)	9%	90%	0%	0%	1%	0%
interview-Family B (adults and children control English)	40%	41%	0%	2%	17%	0%
bilingual classroom (Anglo teacher only)	61%	10%	0%	10%	16%	3%
bilingual classroom (Mexican-American teacher's aide)	4%	95%	0%	1%	0%	0%
regular Kindergarten	90%	7%	1%	0%	1%	1%
boys** at project mobile home (interview situation)	17%	72%	4%	3%	3%	0%
girls at project mobile home (interview situation)	2%	91%	0%	7%	0%	0%
boys at project mobile home (free conversation)	78%	22%	0%	0%	4%	0%
girls at project mobile home (free conversation)	60%	31%	2%	1%	5%	1%

**Girls and boys came to the project mobile home at different times. Our data thus lack interactions between the sexes.

*Figures may not add to 100% due to rounding.

The topic of a discourse does not have as large an influence upon language selection in the children studied as does who is present. The children are able to and in fact do converse about anything in their experience in both languages. However, the discussion of a few topics is more likely to occur in one language than in the other. Topics related to the family-child care, kinship, and food preparation are most often discussed in Spanish; whereas sports, school, and holidays such as Halloween and Thanksgiving are more often discussed in English. When a topic which is habitually discussed in one language happens to come up in a conversation in the other language, there is a high incidence of code-mixing and code-changing.

Discourse type also affects language use. The greatest degree of code-switching is manifested in free conversation. In general code-switching is strongly inhibited in interrogation,[15] and narration.[16]

Setting is the last situational variable clearly involved in language choice. But like the other variables it alone does not determine choice. Thus while Spanish is used with greater frequency in the home than in any other place,[17] English is also heard there--more in the case of some families, less in the case of others. Similarly, while English is the only language of instruction and response in the school outside the bilingual classrooms, interactions among Mexican-Americans in the classroom and on the playground are often in Spanish. The community park and project mobile home, the other settings in which observations were made, appeared to be neutral with respect to language choice. The interaction of the variables, participants, topic, setting, and discourse type account for the data presented in Table Three which is based on a stratified random sample consisting of ten percent of the transcribed corpus.

The catagories topic, participants and setting are useful analytic constructs which have enabled the author to account for a large proportion of code selection behavior. It is probable that at least the categories topic and participants also have some psychological validity for the subjects studied, since metalinguistic comments concerning these categories

have been recorded. Examples are provided below:

13. F (boy, 4): "¿Cómo es que hablas como nosotros?" (to Anglo bilingual elementary school teacher)
(How come you talk like we do?)

14. E (boy, 10): "In English or Spanish?"
J(Anglo researcher) "En español si puedes."
(in Spanish if you can.)
E: "Aw, I can't tell that in Spanish."
J: "Just try, OK?"

4. Code-Selection and Style. Gumperz and Hernandez-Chavez (1972) have shown that code-switching has a stylistic function for adult bilinguals. Our data suggest that style is also a very relevant parameter for analyzing the code switching of children. We have found that children's code switching may serve the following stylistic functions:

4.1 Emphasis. Code-switching for emphasis may occur from Spanish to English or from English to Spanish. The majority of code-switches involve commands. Sixteen of our corpus of seventy-four code-switched commands involve repititions of commands in translation. Sentence 15 is an example:

15. P (girl, 9): "Stay here Roli. Te quedas aquí!"

There are seventeen switches for commands which begin new turns of speaking:

16. R (boy, 4): I go get it.
P (girl, 9): Hazte, hazte pa' allá!
(Get over, get over there)

The remainder are switches or commands within a turn of speaking:

17. C (girl, 7): Who is that? ¡Pégalo!
(Hit him)

Below are examples of emphatic code switches which are not commands. There are only six which seem clear cut in our entire corpus. All involve translations.

18. T (boy, 8): Yo soy segundo. I'm second!

19. R (girl, 9): Ya acabé, I'm done!

20. C (girl, 7): I can't do it. No puedo!

4.2 Focus. Focus is here used to refer to the bringing into prominence of a sentence, in contrast to emphasis here used to apply to the entire sentence. One method of focusing upon a portion of the meaning of a sentence is topicalization. Code-switched topicalized subjects of the type illustrated in 21 below are perhaps used to indicate the ethnicity of the individual who is being discussed. In our data all examples of code-switched topicalizations were Spanish phrases in otherwise English sentences.

21. E (boy, 8): "Este Ernesto, he's cheating."
(This Ernest)

Other examples of focus are:

22. J (boy, 7): "Pegó right there." (He hit...)

23. C (girl, 7): "Come on give me towel, la toalla."

4.3 Elaboration. Occasionally code-switching is used when a child wishes to repeat a message including additional information. Examples are:

24. R (girl, 7): "Yo lo puedo quebrar. Yo lo también...
lo pu(edo) quebrar.
I can break this easy with my nose."
(I can break it. I can break it too...)

25. P (girl, 9): "Roli you stay here. Tú quédate 'jito con Suzy"
(Stay with Suzy honey)

4.4 Clarification. The repetition of an utterance in translation appears to function as a means of resolving ambiguity or clarifying a potential or apparent lack of understanding.

26. P (girl, 9): " ¿Qué tiene?...Will you watch your cards!
¡Fíjate en las cartas!" (to boy 3, who knew little English)

(What does he have?...(...)Watch the cards!)

27. C (girl, 7): "You(r) dog."
J (Anglo Res): "You dog? My woof?"
C : "You(r) dog! Tu perro!" (Your dog!)
J : "OK. What about him?"

28. I (Anglo Res): "¿Dónde fuiste?" (Where did you go?)
R (boy, 3) : "A school." (To school.)
I : "Huh?"
R : "A (la) escuela." (To school.)

4.5 Attention Attraction or Retention. Within a conversation a child may use a code-switch as a device to attract or retain the attention of his audience. It seems likely that such code-switching serves the same function as a raised voice, address forms, gestures, physical contact or eye contact.

29. M (girl, 9): "Now let me do it. Put your feets down. Mira! (Look!) It's Leti's turn again. Hi Leti!"

30. M (girl, 9): "Yo me voy a bajar, Teresa. Look!" (I'm getting down...)

Still other cases appear to be a means of avoiding the tedium or insistence caused by multiple repetition. This type of repetition in translation has the impact of a paraphrase, not a repetition.

31. P (girl, 9): "A ver, a ver...let me see, let me see." (Let me see, let me see....)

32. R (girl, 7): "Éste es el roof. This the roof. This is the roof." (This is the roof....)

4.6 Mode shift. Children's discourse includes narration, commentary, soliliquy, interrogation, etc. Code-switching sometimes marks a point of transition between these modes. For example, code-switching frequently occurs when a child interrupts a story he is telling to make a comment external to the narrative.

33. T (Researcher): "Tell me a story."
S (girl, 5) : "I know a story of pigs and I know a story of Wizard of Oz."
T : "The Wizard of Oz? OK. Tell me whichever one you like."
S : "OK. (takes a deep breath) Así no va. Espérate. (Not that way. Wait.) Oh, Sonny and Cher, OK?"
T : "OK."
S : "Sonny and Cher, it was raining and then Sonny and Cher broke his window..."
34. T (boy, 8) : (final sentence of story told in Spanish) ...respiran las llantas del tren, y ... that's all I could think."
(...the train's tires breathe, and...)
35. J (Anglo Res) : "¿Dónde vive María? "
(Where does María live?)
C (girl, 7) : "María vive en mi casa."
(María lives in my house.)
Really she is.
36. Ev (boy, 8) : "Lo pegó aquí. I saw it."
(He hit him here.)

Similarly, children often code switch when interrupting a conversation with a self-directed or rhetorical statement.

37. R (girl, 7) : "You love boys!"
J (Researcher): (feigns crying)
R : "Why you cry baby. Está llorando."
(He's crying.)
38. L (girl, 5) : "Mira mi (hi)jito. La leche de tu mamá. Oh, darn, now what!"
(Look, honey. Your mom's milk.)

Children also switch code when moving out of an interrogative mode as in the following example:

39. J (Anglo Res) : "¿Ese es Tibaldo o David?"
(Is that Tibaldo or David?)

40. E (boy, 12) : "Este es me Davi. I'm going to beat him up."
(This is my Davi.)

4.7 Topic Shift. Code-switching to introduce a new topic is another linguistic device used by the children. They appear to use such a switch to emphasize the fact that they are no longer interested in what is presently being discussed and wish to proceed to a different topic. Examples are:

41. T (Mexican-American Researcher) : "Dile que es una casa sin techo."
(tell her that it's a house without a roof)

L (girl, 6) : "We have a pretty, uh, Christmas tree."

42. H (girl, 13) : "Me duela la muela."
(My molar hurts)

R (girl, 9) : "Remember when we eat dinner over there at my house, we drink soda."

43. R (boy, 4) : "¿Y dónde mis rabbits?"
(And where my rabbits)

L (girl, 6) : "Ahí están. Les están dando comida."
(There they are. They are giving them food)

D (girl, 6) : "Yo les voy dar comida al pájaro y..."
(I will give food to the bird and...)

R : (will) you (be) playing (checkers)?

D : "Yeah, she's gonna wash her hands."

4.8 Addressee Shift. We have already discussed the fact that the characteristics of his addressee influence a child's language selection. If he switches addressees and the relevant characteristics of the new

addressee are different from those of the previous addressee, a language switch is common. However, sometimes the relevant characteristics remain the same with an addressee switch yet a language switch takes place. It seems likely that such a language switch is sometimes used to help clarify the fact that a new person is being addressed, thereby avoiding the necessity of a later message such as "I'm not talking to you; I'm talking to Maria." The following instance of code-switching appears to have occurred for that reason:

44. H (girl, 13) : "Pregúntale a Patty. Pregúntale. (To Rosa)
(Ask Patty. Ask her)
"Wasn't I at the house? (to Patty)

We also find code-switching associated with a change in addressee when there is an alternation between messages in the second person and messages in the third person:

45. Cr (girl, 6) : "Mira, Rosa está sacando la lengua. (to Anglo res.)
(Look, Rosa is sticking out her tongue)
You like Jim; you like Jim. (to Rosa)

46. R (girl, 7) : Why you cry baby? (to Anglo researcher)
Está llorando. (to audience of researchers and Mexican-American girls)
(He is crying)

Our data does not indicate a uniform developmental sequence in the use of code-switching as a stylistic device. Some older children do not code-switch at all for stylistic reasons in our data, while some younger children do so frequently. Nevertheless, there appear to be some patterns. There are only a few examples of emphatic code-switching by young children. Perhaps, their paucity relates to the fact that most emphatic code-switches involve commands. In our data there are few examples of commands by young children as most of their recorded interactions were with children older than they, where commands by the younger children were defined as inappropriate. There are no examples of focal code-switching by children under seven. Neither are there examples of elaborative

code-switching by children under seven. The latter fact seems strange as sentence elaboration or expansion within a language is a common strategy of young children (vide e.g. Clark, 1974). One might expect that such switching might at least occur going from English into Spanish, the language the young children generally know best. Switching to clarify a meaning by translation appears to be learned quite young. We have many examples from three years olds. Likewise, switching to attract or retain attention is learned early. The youngest child for whom we have clear examples of code-switching to mark mode shift is five. The switch marked a shift from the narrative mode to commentary. All our examples of code-switching to mark topic and addressee shift came from children at least six years old. Disregarding age, the commonest types of stylistic code-switching were attention attraction and retention followed by emphatic code-switching. The others were much less common.

5. Conclusion. It is clear that the studied children's alternation between languages is neither random nor the result of a linguistic deficit. Their code-switching proceeds in accordance with grammatical and functional principles. Socially based principles operating within their speech community permit these children not only to integrate one code into discourse being carried out in another (code-mixing) but also to alternate the actual code of the discourse (code-changing). One purpose served by this sophisticated use of linguistic signs is to identify individual bilinguals as members of a particular community. Code-switching for the bilingual also functions to mark situational changes and stylistic expression, perhaps more clearly than does register alternation for the monolingual. The adept use of code-switching by the bilingual can be viewed as analogous to the creative use of language by a skilled monolingual author or orator.

Note

Much of the analysis presented here was developed in collaboration with James Wentz. Earlier versions may be found in McClure and Wentz (1975), Wentz and McClure (1976) and McClure and McClure (1975).

Footnotes

[1]Within a language register variation by children has been discussed by, among others, Weeks (1971), Carlson and Anisfeld (1969), and Kernan (1974).

[2]Mexican-Americans have only recently settled in both the city and town discussed here. The adults' educational, linguistic, and residential backround varies from some college to a few years of elementary school. All adults speak Spanish, but the dialect or dialects vary. Their English varies from accented fluency to non-existence. Residential histories also differ widely. Some were born in the southwestern U.S., others in Mexico. Some have lived in other communities in the midwest and some have not.

[3]He is the son of the Mexican-American teacher's aide.

[4]It was discontinued at the end of the 1974-1975 school year when a decrease in the enrollment of Spanish speaking children took place.

[5]The parents were all concerned with their children's education especially with their acquisition of skills in English. In the case of two families, school authorities could not convince the parents that their children's participation in a bilingual, bicultural program would not hamper their acquisition of English.

[6]The Mexican-American women came to the school to prepare the food. For many it was a first visit. The Mexican-Americans did not participate in the PTA or other school based activities such as scouting.

[7]An additional thirty-three noun phrases consisting of unmodified nouns have not been included here as their status as code changes is ambiguous.

[8]For detailed analysis of the data from the elicited imitation tasks see McClure and McClure (1975), Wentz and McClure (1976a) and Wentz (1976).

[9]See Wentz and McClure (1976b) for a fuller discussion of cross-language ellipsis.

[10]All of the children studied began to acquire Spanish before English. Even in homes where siblings speak English, pre-school children are addressed primarily in Spanish. While a few of the children were proficient in both languages by age 5, the majority were strongly Spanish dominant on Kindergarten entry. Their acquisition of English was, however, quite rapid thereafter.

[11]Social identity is used here as in Goodenough (1969).

[12]The use of the term identity relationship also follows Goodenough (1969).

[13]This child's teenage siblings are, together with the teenaged children of the Mexican-American teacher's aide, the most integrated into the Anglo community. They use English almost exclusively even in the home despite their parent's strong preference for the use of Spanish as the home language.

[14]The research staff included a female Mexican-American, a male Mexican-American, a female Puerto Rican, a female Peruvian, two Anglo males, and one Anglo female.

[15]Interrogation in English of the preschool children in the small city was an exception. The children often answered English questions with Spanish responses even when they are able to respond in English.

[16]Code-switching could, however, be artificially induced in narration by request. See McClure and Wentz (1976) for details.

[17] Interestingly, two siblings whose English was rudimentary used it more freely at home than elsewhere. They were the only English speaking members of the household, and perhaps they felt less inhibited in speaking English there because there was no one to note their errors or difficulties.

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